

Translation

PATENT COOPERATION TREATY

PCT/EP2003/012248



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P27120/WO Kf	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/EP2003/012248	International filing date (<i>day/month/year</i>) 03 November 2003 (03.11.2003)	Priority date (<i>day/month/year</i>) 05 November 2002 (05.11.2002)
International Patent Classification (IPC) or national classification and IPC F04B 1/20		
Applicant BRUENINGHAUS HYDROMATIK GMBH		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (*sent to the applicant and to the International Bureau*) a total of _____ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

☒ Box No. I Basis of the report

☐ Box No. II Priority

☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

☐ Box No. IV Lack of unity of invention

☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

☐ Box No. VI Certain documents cited

☐ Box No. VII Certain defects in the international application

☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 19 April 2004 (19.04.2004)	Date of completion of this report 09 November 2004 (09.11.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/012248

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-10 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 1-14 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1/3-3/3 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1 - 14	YES
	Claims		NO
Inventive step (IS)	Claims	1 - 14	YES
	Claims		NO
Industrial applicability (IA)	Claims	1 - 14	YES
	Claims		NO

2. Citations and explanations

Reference is made to the following document:

D1: DE 43 40 061 A.

1. Document D1, which is considered the closest prior art, discloses a control plate for an axial piston machine according to the preamble of claim 1.

The features of the characterizing part of claim 1 are novel and consequently claim 1 meets the requirements for novelty of PCT Article 33(2).

2. The control plate according to claim 1 differs from that of document D1 in that the radially inner edge (47) of the control plate (20) is in the form of a centering surface (29) which centres the control plate (20) on a centering body (7) situated on the housing side, and in that the centering surface (29) consists of several part surfaces (29.1, 29.2, 29.3), which are embodied on segments (43.1, 43.2, 43.3) of the inner edge (47) of the control plate (20) which extend radially inward into the passage (38) and are separated by recesses (36.1, 36.2, 36.3).

The problem to be solved by the invention is that of simplifying the processing of the control plate and reducing component weight. There was no reason for a person skilled in the art to redesign the passage in the control plate of an axial piston machine of the kind in question so as to permit the centering of the control plate along its inner edge. Consequently, the subject matter of claim 1 involves an inventive step (PCT Article 33(3)).

3. Independent claim 8 discloses an axial piston machine having a control plate according to claim 1. As a result, the subject matter of claim 8 is novel and inventive.
4. Claims 2-7 and 9-14 are dependent on claims 1 and 8 and therefore likewise meet the PCT requirements for novelty and inventive step.